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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,818	08/25/2003	Masaru Inoue	031058	1815

23850 7590 12/27/2005

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EXAMINER

HEINRICH, SAMUEL M

ART UNIT PAPER NUMBER

1725

DATE MAILED: 12/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/646,818

Applicant(s)

INOUE ET AL.

Examiner

Samuel M. Heinrich

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.  
4a) Of the above claim(s) 6-9 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-5 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant has added language to claims 1 and 2 which is not clear and which changes the scope of the elected invention. All claims are understood to be irradiating a laser beam onto the thin plate or suspension. The newly added language describes a beam which is "a combined shape of characters" and this description is not clear and is not clearly supported in the specification. Is the laser beam shaped as a character or a combination of characters? Is the laser scanned in a pattern defining a character or a combination of characters? What is now being claimed in claims 1 and 2 is not clearly described and causes the scope of all claims to be unclear.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

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the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,640,604 B2 to Matsushita. Matsushita discloses bending of a suspension which supports a magnetic head by using thermal induced bending resulting from linearly scanning a laser beam on surface areas of the suspension. It would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art that the use of either the single or repeated laser scanning and the use of one scan position or of shifting the scan position on the metal plate as disclosed by Matsushita is a description which represents the instant claimed load adjustment features and angle adjustment features. Matsushita has not described the laser beam as being a combined shape of characters and has not described the suspension areas using labels, but the suspension structure is known and the locations which will effect suspension adjustment are easily identifiable. The instant claimed particular hard disk head suspension structure elements are well known in the art.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of USPN 6,640,604 B2 to Matsushita. Matsushita discloses bending of a suspension which supports a magnetic head by using

thermal induced bending resulting from linearly scanning a laser beam on surface areas of the suspension. AAPA (Specification pages 1-3, Description of the Related Art) describes well known hard disk drive manufacture comprising correction of load, roll angle, and pitch angle and describe conventional application of laser beam energy in order to thermally deform suspension elements. The use of XYZ laser scanning in shapes or patterns which are related to the work piece size and shape and which are related to the desired change in shape would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because suspension element material properties are well known with respect to heat input and with respect to bending or deforming due to heat input. Obtaining a desired change in shape would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art depending on examination of the work piece structure and subsequent calculation and routine experimentation for obtaining the desired deformation. It would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art that the use of either the single or repeated laser scanning and the use of one scan position or of shifting the scan position on the metal plate as disclosed by Matsushita is a description which represents the instant claimed load adjustment features and angle adjustment features. Matsushita has not described the laser beam as being a combined shape of characters and has not described the suspension areas using labels, but the suspension structure is known and the locations which will effect suspension adjustment are easily identifiable. The instant claimed particular hard disk head suspension structure elements are well known in the art.

***Response to Arguments***

Applicant's arguments filed October 24, 2005 have been fully considered but they are not persuasive. Applicant argues that Matsushita fails to disclose the particular irradiation shape combination corresponding to either one or both the load adjustment amount and the angle adjustment amount. This argument is not convincing. Depending on the material and shape of the work piece being treated, choosing the particular heat input to a work piece in order to effect particular deformation is a matter of calculation and some routine experimentation. The particular work piece articles which are recited in the claims are known suspension articles.

***Conclusion***

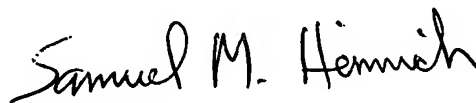
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel M. Heinrich whose telephone number is 571-272-1175. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Dunn can be reached on 571-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Samuel M Heinrich  
Primary Examiner  
Art Unit 1725

SMH